F. P. PFLEGHAR.

DOOR LOCK.

APPLICATION FILED JUNE 5, 1906.

914,670. Patented Mar. 9, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

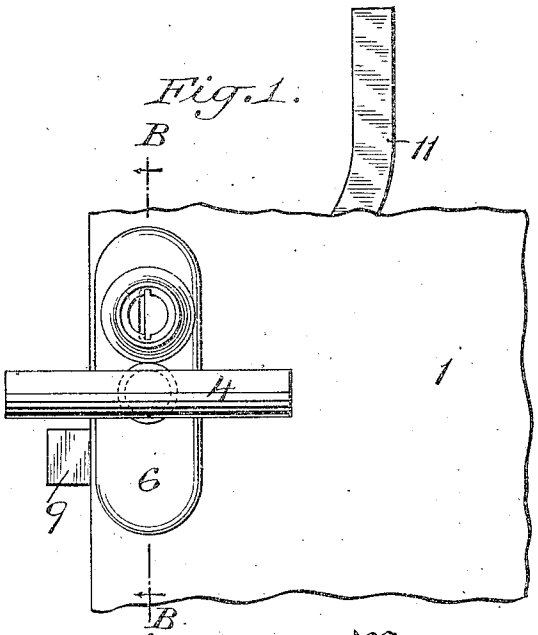


Fig. 2.

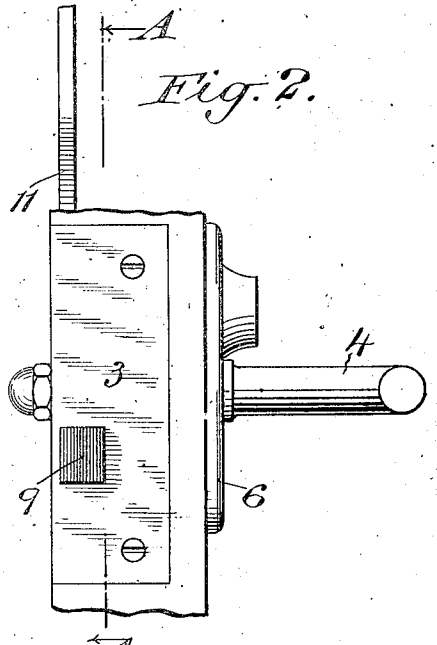


Fig. 3.

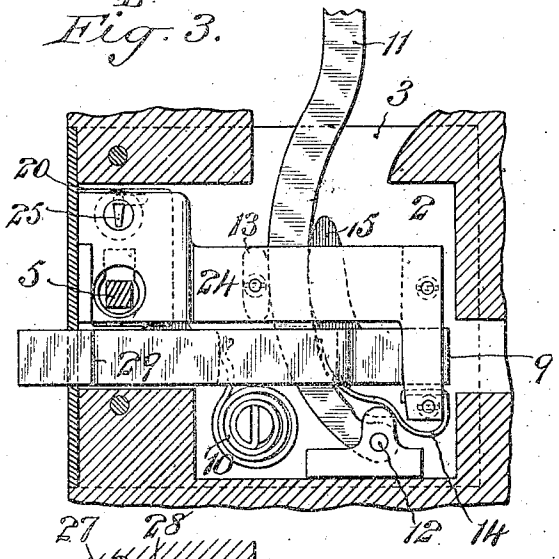


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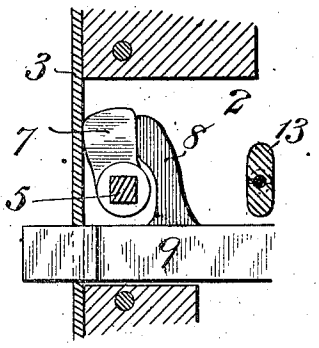


Fig. 6.

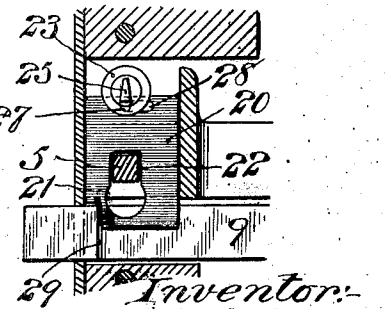
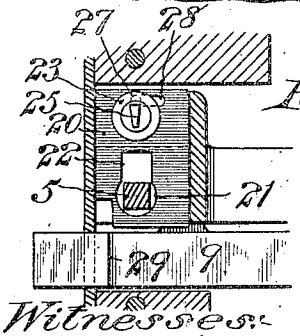


Fig. 5.



Witnesses:-
F. George Barry,
A. Barry

Inventor:-
Frank P. Pfleghar
by attorneys
Brownell & Brownell

F. P. PFLEGHAR.

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2 SHEETS—SHEET 2.

Fig. 7.

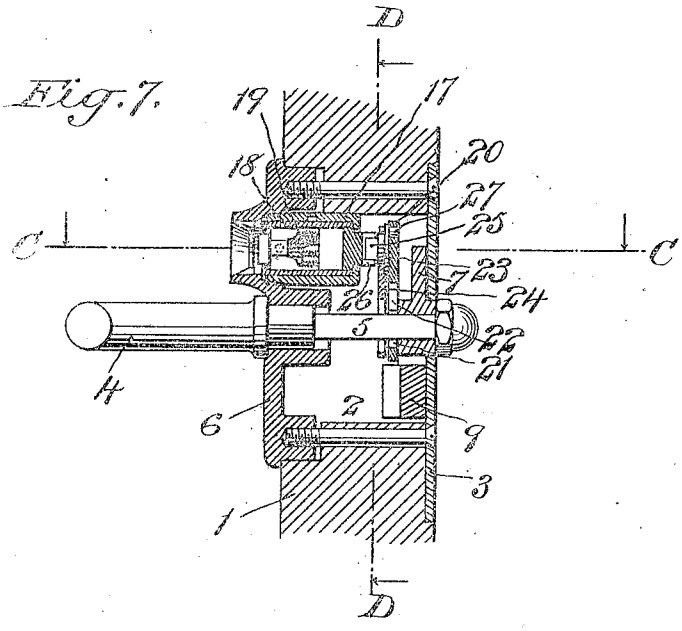


Fig. 8.

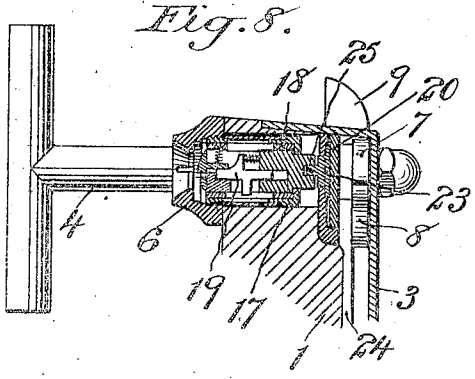


Fig. 9.

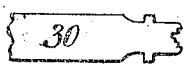
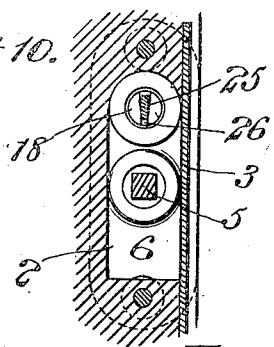


Fig. 10.



Witnesses:-
F. George Barry,
A. Barry

Inventor:-
Frank P. Pfleghar
by attorneys
Brown & Sewall

UNITED STATES PATENT OFFICE.

FRANK P. PFLEGHAR, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO F. P. PFLEGHAR & SON, OF NEW HAVEN, CONNECTICUT, A FIRM.

DOOR-LOCK.

No. 914,670. Specification of Letters Patent. Patented March 9, 1909.

Application filed June 5, 1906. Serial No. 320,241.

To all whom it may concern:

Be it known that I, FRANK P. PFLEGHAR, a citizen of the United States, and resident of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Door-Locks, of which the following is a specification.

My invention relates to improvements in door locks and has for its object to provide a novel and effective device for locking the latch bolt.

This invention is particularly well adapted for use in connection with limousine doors.

In the accompanying drawings, Figure 1 represents an outside view of a portion of a door with my improved lock applied thereto, Fig. 2 is an end view of the same, Fig. 3 is a vertical section taken in the plane of the line A—A of Fig. 2 looking in the direction of the arrows, Fig. 4 is a detail section showing the connection between the shank of the outside handle and the latch bolt, Fig. 5 is a detail section showing the locking bolt in its unlocked position, Fig. 6 is a similar view showing the locking bolt in its locked position, Fig. 7 is a section taken in the plane of the line B—B of Fig. 1, looking in the direction of the arrows, Fig. 8 is a section taken in the plane of the line C—C of Fig. 7, looking in the direction of the arrows, Fig. 9 is a detail view of a key fitted to the particular lock shown herein, and Fig. 10 is a detail section taken in the plane of the line D—D of Fig. 7, looking in the direction of the arrows.

The door is denoted by 1. This door has the usual recess 2 for the reception of the working parts of a lock.

The lock casing plate is denoted by 3 and it is extended along the front end and inner side of the door.

The outer latch bolt handle is denoted by 4 and the angular portion of its shank by 5. The handle shank extends through the front plate 6 of the lock and it has fixed thereto the usual arm 7 within the recess 2 arranged to engage a lug 8 uprising from the latch bolt 9 for sliding the latch bolt into its withdrawn position against the tension of the spring 10.

The inner lever handle for throwing the latch bolt from the inner side of the door is denoted by 11 and it is pivoted at 12 within the recess 2. This handle 11 is normally held at the limit of its forward movement against a stop 13 by means of a spring 14. This lever handle 11 is arranged to engage a lug 15 uprising from the latch bolt 9 for sliding the latch bolt into its withdrawn position against the tension of the spring 10.

The cylinder 17 of a tumbler lock is screwed or otherwise secured to the front plate 6 of the lock. A barrel 18 is mounted to rotate in the cylinder 17, which barrel contains a plurality of spring actuated tumblers 19.

The locking bolt is denoted by 20, through which locking bolt the squared portion 5 of the shank of the outer handle extends. When the locking bolt is in its withdrawn or unlocked position, the shank 5 is located in an enlarged portion 21 of a recess through the locking bolt and when the locking bolt is thrown into its locking position, the shank 5 is held against rotation in a smaller portion 22 of the said recess.

The connection between the barrel 18 of the tumbler lock and the locking bolt 20 is as follows: A rocking plate 23 is mounted in the intermediate plate 24 of the lock casing, which rocking plate is provided on one face with a wedge shaped lug 25 arranged to enter a kerf 26 in the end of the barrel 18, the other end of the said rocking plate having a pin 27 which enters a transversely elongated slot 28 in the locking bolt 20. The locking bolt 20 is fitted to slide between the intermediate plate 24 and the casing plate 3 of the lock, the advanced end of the said locking bolt being arranged in position to be thrown into and out of position back of a shoulder 29 on the latch bolt 9.

The key which I have shown for operating the lock is denoted by 30. When it is desired to lock the latch bolt, the key 30 is inserted into the lock and turned thus causing the locking bolt 20 to be advanced into position to engage the shoulder 29 on the latch bolt 9 thus preventing the latch bolt from being withdrawn. This same advance movement of the locking bolt 20 will cause the smaller portion 22 of the recess through the bolt to be moved into engagement with the angular portion 5 of the outer handle shank thus preventing the said handle from being turned. It will also be seen that the inside lever handle will be secured against movement by the movement of the locking bolt into position back of the shoulder 29 on the latch bolt.

It is to be understood that when the latch bolt is to be released, the movement of the

key 30 is reversed thus withdrawing the locking bolt from its position at the rear of the shoulder 29 on the latch bolt. This withdrawal of the locking bolt will bring the large portion 21 of the recess in the locking bolt around the angular portion 5 of the shank of the outer handle thus permitting the shank to be turned after withdrawing the latch bolt.

What I claim is:—

In a door lock, a latch bolt, a handle shank arranged to operate the latch bolt, a slide provided with an opening embracing said shank, the said opening having a part in which the shank is free to rotate and another part in which the shank is locked against rotation, the said slide being also provided with a transversely elongated slot, a tumbler lock, a rocking plate locked thereto, a pin eccentrically mounted on said plate and in engagement with said slot for moving the slide into and out of locking engagement with the shank.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this first day of June, 1906.

FRANK P. PFLEGHAR.

Witnesses;
FRANCES I. MARTIN,
MAE D. CONATY.